# INFANT MORTALITY IN KING COUNTY: AN UPDATE

A REPORT FROM THE

SEATTLE-KING COUNTY DEPARTMENT OF PUBLIC HEALTH INFANT MORTALITY REVIEW PROJECT





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#### **EXECUTIVE SUMMARY**

The infant mortality rate is a fundamental indicator of a community's health and well-being. This report updates trends in infant mortality through 1995. The sources of information for this report are birth and death certificates. The key findings of the report include:

- The infant mortality rate in King County in 1995 (the most recent year for which data are available) was 5.6 per 1000 live births. The 1995 Seattle rate was 7.2 per 1000, the Washington rate was 5.8 per 1000 and the United States rate was 7.6 per 1000 live births. There were 122 deaths among infants living in King County in 1995, 45 of which were in Seattle.
- The infant mortality rates in King County and in King County outside of Seattle continued to decline, while the rate in Seattle, after declining dramatically from the 1987-1989 period to the 1992-1994 period, may have begun to level off. However, examination of the rate in subsequent years is required before drawing any conclusions that the declining trend of recent years has ended; the data are also consistent with the observed rate in the 1993-1995 period being a random fluctuation in a generally downward trend.
- The leading causes of infant deaths in the 1993-1995 period in King County, as in previous years, were SIDS, perinatal conditions, congenital anomalies, and death due to prematurity. The rates for SIDS and death due to perinatal conditions have plateaued since the early 1990s. While the death rate due to prematurity has increased since 1990, the increase is not statistically significant. This increase may be partially explained by an increase in mortality rate among very low birthweight infants.
- As in previous years, African and Native Americans remained at higher risk of dying as infants. During the 1991-1995 period, African American infants were 2.4 times, and Native American infants were 1.9 times more likely to die, as compared to white infants. The Native American infant mortality rate continued to decline in the 1993-1995 period, while the rate among African Americans appeared higher than that observed during the 1992-1994 period. However, the relatively small number of deaths among African American infants makes the difference between these periods statistically indistinguishable. Whether the 1993-1995 rate signals an end of the decline in infant mortality among African Americans observed since 1989 or is a random fluctuation in a generally downward trend will only become clear with data from forthcoming years.
- Infant mortality and risk factors for infant death remained associated with poverty. While the rate of infant death has declined substantially in high poverty areas of the county since the mid 1980s, it appears that the period of marked decline in the high poverty areas ended in the 1993-1995 period.
- The 1993-1995 infant mortality rate in the Central Region appeared higher than the 1992-1994 rate (although the difference was not statistically significant). Data from coming years is needed to determine whether this is the end of the decline observed since 1989, or a random variation in a generally downward trend. Meanwhile, the infant mortality rate appeared to decrease during the 1993-1995 period in the South Region after stagnating since 1988, although the decrease since the 1992-1994 period was not statistically significant. Further data are needed to determine whether infant mortality rate is declining in South Region.
- Within small areas of the county, infant mortality rates in Central and Southeast Seattle were 1.7 and 1.6 times higher than the overall King County rate, similar to the previous period of 1991-1994. They were the only areas to significantly exceed the county average during the 1991-1995 period. Bellevue's rate of 3.5 per 1000 live births was the only rate significantly lower than the county average.

• Among the measured risk factor data available from birth certificates for King County, the rates of maternal smoking, maternal alcohol use and inadequate prenatal care continued to decrease in 1995 while the proportion of births to unmarried mothers continued to increase. The proportion of low birthweight births and preterm births remained steady.

#### **CONCLUSIONS**

The infant mortality rate in King County has continued to decline. This encouraging trend may in part be explained by reductions in risk factors for infant death, attributable to expanded health services for pregnant women, advances in medical care, and changes in infant sleep position. However, the new data for 1993-1995 period suggest that the rapid decline in rates may have slowed for African Americans, residents of the Central Region, and residents in high poverty areas. Alternatively, the somewhat higher 1993-1995 rates observed in these groups may represent a random variation in a continued downward trend.

The increase in the infant mortality rate among African Americans was primarily caused by an increase in SIDS deaths, with a smaller amount attributable to more deaths caused by prematurity. While use of prenatal care continued to improve in African Americans, the rate of improvement slowed.

The increase in the infant mortality rate in the Central Region was mainly caused by an increase in SIDS deaths as well as a smaller increase in deaths caused by prematurity and perinatal conditions. The rate of improvement in prenatal care utilization slowed in recent years.

The increase in the infant mortality rate in high poverty areas was mainly caused by a small increase in deaths due to prematurity and perinatal conditions. Slowing of the rate of adequate utilization of prenatal care was also observed.

It thus appears that the decline in the infant mortality rate among the more vulnerable populations in King County (African Americans, residents of high poverty areas in King County, and residents of the Central Region, particularly of Central/Southeast Seattle) may have ended in the 1993-1995 period. The SIDS rate also increased or leveled off in these populations and the rapid rate of improvement in prenatal care utilization slowed. These data indicate the ongoing need to encourage early and continuous prenatal care and promote safe sleeping conditions for young infants in these populations.

Further progress in reducing infant deaths will come through collaboration between many sectors of our community. Strategies detailed in our previous report<sup>a</sup> continue to provide direction on:

- Emphasizing placing infants on their backs to prevent SIDS deaths
- Assuring access to prenatal care and maternity support services
- Reducing substance abuse
- Improving coordination of services by multiple providers
- Assuring comprehensive follow-up of high-risk clients
- Improving the quality of medical care during labor and delivery
- Strengthening the capacity and accountability of Child Protective Services to protect infants
- Emphasizing implementation of these strategies among African and Native Americans and for low income and Central/Southeast Seattle and South Region populations.

<sup>a</sup> Krieger J, El-Bastawissi A, Dickson A, Kline C, Holland S, Fabian P, Schroeder C, and Alexander ER. Healthier Mothers, Healthier Babies: Declining Infant Mortality in King County, August 1996.